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NOTICE OF ALLOWANCE AND FEE(S) DUE

34036 7590 01/04/2010 Silicon Valley Patent Group LLP 18805 Cox Avenue Suite 220 Saratoga, CA 95070 EXAMINER

NOGUEROLA, ALEXANDER STEPHAN

ART UNIT PAPER NUMBER

1795

DATE MAILED: 0104/2010

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------|-------------------|---|---------------------|------------------|
| 10/520,439 | 04/05/2006 | Ian Mayes | NAN143 US 8016 | 5914 |
| TITLE OF INVENTION: | MONITORING APPARA | TUS AND METHOD FOR IMPROVING THE ACCURATE | RACY AND REPEATABL | LITY OF |

ELECTROCHEMICAL CAPACITANCE VOLTAGE (ECV) MEASUREMENTS

| APPLN. TYPE | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(8) DUE | DATE DUE |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | NO | \$1510 | \$300 | \$0 | \$1810 | 04/05/2010 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

| appropriate. All further indicated unless correcte maintenance fee notifical | correspondence includired below or directed oth | of transmitting the 1330 ig the Patent, advance of herwise in Block 1, by (a | rders and notification of r a) specifying a new corres | naintenance fees wi pondence address; | II be maile and/or (b) | ed to the current indicating a separ | correspondence address as rate "FEE ADDRESS" for |
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| Saratoga, CA 95 | 070 | | | | | | (Depositor's name) |
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| nonprovisional | NO | \$1510 | \$300 | \$0 | | \$1810 | 04/05/2010 |
| EXAM | INER | ART UNIT | CLASS-SUBCLASS | 1 | | | |
| NOGUEROLA, ALE | XANDER STEPHAN | 1795 | 205-775000 | • | | | |
| "Fee Address" ind. PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A | ondence address (or Cha 3/122) attached. ication (or "Fee Address 22 or more recent) attach ND RESIDENCE DATA | nge of Correspondence "Indication form ed. Use of a Customer A TO BE PRINTED ON 2 | 2. For printing on the p (1) the names of up to or agents OR, alternativ (2) the name of a singl registered attorney or a 2 registered patent atto listed, no name will be THE PATENT (print or type data will appear on the p T a substitute for filing an | 3 registered patent vely, e firm (having as a agent) and the name meys or agents. If n printed. | attorneys member a s of up to o name is | I | cument has been filed for |
| (A) NAME OF ASSIG | GNEE | categories (will not be pr | (B) RESIDENCE: (CITY | and STATE OR CO | OUNTRY) | 1 | up entity 🚨 Government |
| 4a. The following fee(s): Issue Fee Publication Fee (N Advance Order - # | o small entity discount p | | o. Payment of Fee(s): (Plea A check is enclosed. Payment by credit car The Director is hereby overpayment, to Depo | d. Form PTO-2038 | is attached | l. | |
| | s SMALL ENTITY state | is. See 37 CFR 1.27. | b. Applicant is no lon | | | | |
| NOTE: The Issue Fee an interest as shown by the | d Publication Fee (if req records of the United Sta | uired) will not be accepted tes Patent and Trademark | d from anyone other than t Office. | he applicant; a regis | tered attori | ney or agent; or the | e assignee or other party in |
| Authorized Signature | | | | Date | | | |
| Typed or printed name | | | | Registration No | | | |
| This collection of inform an application. Confident submitting the complete this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223 | ation is required by 37 C tiality is governed by 35 d application form to the ons for reducing this but firginia 22313-1450. DC 13-1450. | FR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the O NOT SEND FEES OR (| on is required to obtain or r 1.14. This collection is est depending upon the indiv e Chief Information Office COMPLETED FORMS TO | etain a benefit by th imated to take 12 m idual case. Any con er, U.S. Patent and T D THIS ADDRESS. | e public w inutes to c nments on rademark SEND TO | hich is to file (and complete, including the amount of tin Office, U.S. Depa D: Commissioner f | by the USPTO to process) g gathering, preparing, and the you require to complete rtment of Commerce, P.O. or Patents, P.O. Box 1450, |

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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



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| Silicon Valley Patent Group LLP | | | NOGUEROLA, ALE | XANDER STEPHAN | |
| 18805 Cox Aver | nue | • | | ART UNIT | PAPER NUMBER |
| Suite 220 Saratoga, CA 95 | 070 | | | 1795 DATE MAII ED: 01/04/201 | 0 |

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 804 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 804 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

| Application No. | Applicant(s) | _ |
|-----------------|--------------|---|
| 10/520,439 | MAYES ET AL. | |
| Examiner | Art Unit | _ |
| ALEX NOGUEROLA | 1795 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- 1. This communication is responsive to preliminary amndt, of 05/26/2009 and election of 9/14/09.
- 2. The allowed claim(s) is/are 1-7.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - b) ☐ Some* c) ☐ None of the:
 - 1. A Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No.
 - 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6.

DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2. Notice of Draftperson's Patent Drawing Review (PTO-948)
- Information Disclosure Statements (PTO/SB/08). Paper No./Mail Date See Continuation Sheet
- 4. Examiner's Comment Regarding Requirement for Deposit
- of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date
- 7. X Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- Other .

 $Continuation \ of \ Attachment(s) \ 3. \ Information \ Disclosure \ Statements \ (PTO/SB/08), \ Paper \ No./Mail \ Date: \ 4/03/09, \ 9/27/07, \ 3/07/05.$

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DETAILED ACTION

EXAMINER'S AMENDMENT

 This application is in condition for allowance except for the presence of claims 8-26 directed to an invention non-elected without traverse. Accordingly, claims 8-26 been cancelled.

Allowable Subject Matter

- Claims 1-7 are allowed.
- 3. The following is an examiner's statement of reasons for allowance: independent claim 1 requires the steps of "measuring the area of the etched well at the end of the ECV profiling; [and] applying the measurement of the area of the etched well to the ECV profiling data to produce adjusted data more reproducibly representative of the ECV profile." Claims 2-7 depend directly or indirectly from claim 1.

Gopal et al. "Electrochemical Capacitance Voltage Profiling of the Narrow Band Gap Semiconductor InAs, " Journal of Electronic Materials, vol. 29, No. 11, 2000, ("Gopal") discloses an electrochemical capacitance voltage method that meets all of the

limitations of Applicant's claim 1 except for the two steps quoted above. It would not have been obvious to also perform these two steps in the method of Gopal because Gopal provides "[a] pump which forces a jet of electrolyte onto the sample surface ... periodically to prevent buildup of reaction byproducts and bubbles near the surface", so avoiding inaccuracies in the contact area. Thus Gopal assumes a constant area of the etched well throughout the profiling. See the first and second paragraphs of the section entitled Experiment, which begins on page 1334.

Page 3

- 4 The International Search Report for application PCT/GB03/02875 only lists "A" references.
- 5 The English language translation of the Japanese Office action listed on the Information Disclosure Statement received on April 03, 2009 only makes what in US patent practice is equivalent to 35 U.S.C. 112, second paragraph, indefiniteness rejections. There are no prior art rejections. These indefiniteness rejections do not apply to the allowed claims in the instant application either because the phrases considered indefinite are not in the allowed claims or the indefiniteness has been removed by the preliminary amendment of May 26, 2009.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably Application/Control Number: 10/520,439 Page 4

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accompany the issue fee. Such submissions should be clearly labeled "Comments on

Statement of Reasons for Allowance."

6. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to ALEX NOGUEROLA whose telephone number is (571) 272-

1343. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, NAM NGUYEN can be reached on (571) 272-1342. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Alex Noguerola/

Primary Examiner, Art Unit 1795

December 30, 2009